

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAZUYUKI TOGASHI

Appeal No. 1998-2933
Application 08/439,082¹

ON BRIEF

Before BARRETT, FLEMING, and LEVY, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed May 11, 1995, entitled "Keyless Security System," which claims the foreign filing priority benefit under 35 U.S.C. § 119 of Japanese Application 6-106848, filed May 20, 1994.

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1, 2, 4-6, and 8-21.

We reverse but enter a new ground of rejection.

BACKGROUND

The disclosed invention relates to a keyless security system for a vehicle in which a vehicle-mounted receiver unit is switched from a power-saving periodic activation mode to a continuous activation mode when valid control signals are transmitted from a portable transmitter unit. The admitted prior art system, figures 7 and 8, utilizes a complicated and costly electric field detector to detect transmitted signals and switch to the continuous active mode. The invention uses idling information (either a plurality of bits of only logical one or logical zero or a plurality of Manchester code signals) preceding the data information, which idling information is detected to indicate the transmitted remote control signal and allows elimination of the electric field detector.

Claim 1 is reproduced below.

1. A keyless security system for a vehicle, the keyless security system comprising:

a portable transmitter for transmitting a predetermined remote control signal which contains idling information, wherein said idling information is composed

of a plurality of digital bits comprising only one of logical one and logical zero information; and

a signal receiver for receiving said remote control signal, said signal receiver including:

a signal processing unit for processing said received remote control signal; and

a control unit for controlling a receptive state of said signal receiver in response to the processed remote control signal, and for monitoring the active condition of at least one sensor mounted on said vehicle;

wherein said control unit detects a transmission of said remote control signal from said portable transmitter by identifying the idling information supplied from said signal processing unit.

The Examiner's rejection relies on the admitted prior art (APA), specifically, Appellant's figures 7 and 8, described in the Background of the Invention (specification, pages 1-8), and the comparison of the prior art to the present invention (specification, page 17, lines 6-22, and page 18, lines 22-25), and the following prior art:²

² The Examiner's Answer cites Nicholas et al. (Nicholas), U.S. Patent 5,193,210, issued March 9, 1993, as one of the references relied upon in the rejection of the claims on appeal. However, we find no mention of Nicholas in the statement of the rejection in either the Final Rejection or the Examiner's Answer and, thus, it will not be considered.

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Stouffer	5,049,867	September 17,
1991		
Suman et al. (Suman)	5,278,547	January 11,
1994		

Claims 1, 2, 4-6, 8-12, and 14-21³ stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA and Suman. The Examiner finds that Suman discloses a start bit and unique code before the control signal and concludes that this would have suggested the desirability of using idling information in addition to control information in the APA system (Final Rejection, p. 3). The Examiner states that "[o]ne of ordinary skill in the art would have readily recognized using a plurality of bits instead of only one start bit as in Suman because if a plurality of bits are used the detection of the activation of the system would be ensured" (Final Rejection, p. 3).

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA and Suman, further in view of

³ The statement of the rejection in the Examiner's Answer refers to claims 1, 2, 4-12, and 14-20 (Examiner's Answer, p. 4). This is presumed to be a careless error because it includes canceled claim 7, and does not include claim 21. We rely on the statement of the rejection in the Final Rejection.

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Stouffer. Stouffer is applied as showing that a Manchester code was well known in the prior art.

We refer to the Final Rejection (Paper No. 8) (pages referred to as "FR__") and the Examiner's Answer (Paper No. 16) (pages referred to as "EA__") for a statement of the Examiner's position, and to the Brief (Paper No. 15) (pages referred to as "Br__") and the Reply Brief (Paper No. 17) (pages referred to as "RBr__") for a statement of Appellant's arguments thereagainst.

OPINION

The dependent claims have been argued to stand or fall together with their respective independent claims (Br5). The Examiner states that Applicant has not addressed claims 6, 11, and 21 in detail, but traverses the rejection for reasons similar to those provided with respect to claim 1; therefore, the Examiner does not address Appellant's comments regarding claims 6, 11, and 21 (EA13). Because of the differences in claim scope among independent claims 1, 6, 11, and 21, they cannot stand together, so we address them separately.

Claims 1, 2, 4, and 5

Claim 1 recites "a control unit for controlling a receptive state of said signal receiver in response to the processed remote control signal," but does not recite that the receptive state is between active/inactive (continuous/standby) modes. The APA discloses switching between continuous/standby modes in response to a detected electric field of the remote control signal. Claim 1 recites that the receptive state is controlled "in response to the processed remote control signal," which does not require control in response to identifying the idling information. Claim 1 does not exclude use of an electric field detector (compare claim 11) and so the "processed remote control signal" could be the signal processed by the electric field detector in the APA. While the control unit detects a transmission "by identifying the idling information," it is not recited how this detection is used, if at all, to control the signal receiver except that it is inferred to be part of the processing of the remote control signal. In fact, claim 1 does not specify that the idling information precedes the data information so that it could be used to change the receptive state for receiving the data information; compare claim 6

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which recites (1) the idling information precedes the data information, and (2) the control unit and signal receiver are placed in a continuously activated condition when the control unit detects the idling information. Claim 1 is very broad and does not recite that identification of the idling information controls a receptive state of the signal receiver. The differences between the subject matter of claim 1 and the APA are that (1) the APA does not use "idling information . . . composed of a plurality of digital bits, and (2) claim 1 requires detecting transmission of the remote control signal by "identifying the idling information," not by detecting an electric field strength of the data information as in the APA.

In the Examiner's Answer, the Examiner analogizes the start bit in Suman with the claimed idling information and states that "one skilled in the art would have readily recognized that the start bit is used to start the receiver which in turn basically provides the same function as the claimed idling information" (EA10-11). Appellant replies that this is a naked assertion that fails to point to any suggestion or motivation in the references or in the knowledge

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generally available to one of ordinary skill in the art
(RBr2).

We agree with the Examiner that it would have been obvious to add a start bit⁴ to the transmitted data in the APA in view of Suman, but do not find support for the conclusion that the start bit performs the same function as the idling information.⁵ Since a start bit performs a control function, it is not clear that a start bit can technically be considered an idle character. However, assuming a start bit is an idle character, just because the start bit is at the front of the data information does not imply that Suman performs the function of identifying the bits to detect a transmission. The problem is that Suman could use an electric field detector as in the APA; we just do not know enough about Suman's

⁴ A "start bit" is defined as a "[s]ynonym for start signal," IBM Dictionary of Computing (George McDaniel ed., McGraw-Hill, Inc. 10th ed. 1993), and a "start signal" is defined as follows, id.:

(1) In a start-stop transmission, a signal at the beginning of a character that prepares the receiving device for reception of the code elements. (I) (2) A signal to a receiving mechanism to get ready to receive data or perform a function. (A) (3) Synonymous with start bit, start element.

⁵ An "idle character" is defined as "(1) A character transmitted on a telecommunication line that is not intended to represent data and does not result in an output operation at the accepting terminal," IBM Dictionary of Computing.

operation. That is, even if a start bit were added preceding the data information in the APA in view of Suman, the APA would still use the electric field detector to detect the transmission, not the start bit, absent some suggestion in Suman or the knowledge in the art to modify the APA to identify the idling information to detect a transmission. Thus, we conclude that the combination of the APA and Suman does not suggest the limitation that "said control unit detects a transmission of said remote control signal from said portable transmitter by identifying the idling information" (emphasis added).

Claim 1 also requires "a plurality of digital bits." The Examiner states that "[o]ne of ordinary skill in the art would have readily recognized [the obviousness of] using a plurality of bits instead of only one start bit as in Suman because if a plurality of bits are used the detection of the activation of the system would be ensured" (FR3).

Appellant argues that it would not have been obvious to modify the start bit of Suman to include a plurality of start bits. It is argued that the system of Suman is always active, so there is no need to increase the number of start bits to

ensure the activation of the system (Br9). We do not find where the Examiner addresses this argument. We find no express or implied teaching in Suman to use additional start bits or that additional start bits would ensure the activation of the system. It does not appear that the system in Suman is "activated" in any way by the start bit and, thus, there is no suggestion that adding bits will ensure activation. The Examiner has not pointed to any knowledge in the art that increasing the number of start bits is desirable or necessary.

Appellant also argues that there is no other motivation to increase the number of start bits because this would unnecessarily increase the amount of information processed by the receiver (Br9). The Examiner states that this argument is not persuasive because the amount of additional processing time is negligible to the user (EA11-12). Even if the amount of additional processing time is negligible, this does not amount to a positive teaching of increasing the number of start bits.

Because the combination of the APA and Suman does not suggest "idling information . . . composed of a plurality of digital bits" or that "said control unit detects a

transmission of said remote control signal from said portable transmitter by identifying the idling information," the Examiner has failed to establish a prima facie case of obviousness. The rejection of claims 1, 2, 4, and 5 is reversed.

Claims 6 and 8-10

Claim 6 does not recite that the idling information comprises a plurality of digital bits.

Claim 6 recites that "said control unit detects a transmission of said remote control signal from the remote control unit by identifying the supplied idling information" (emphasis added) which is similar to the limitation discussed in connection with claim 1 which is missing from the combination of the APA and Suman.

In addition, claim 6 recites that "said control unit and said signal receiver are placed in a continuously activated condition when said control unit detects the idling information of the received remote control signal," which requires taking specific action upon detection of the idling information. Suman does not disclose what action is taken upon detection of the start bit and, therefore, does not

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suggest modifying the APA to place the signal receiver in a continuously active condition based on detection of the start bit.

Because the combination of the APA and Suman does not suggest that "said control unit detects a transmission of said remote control signal from the remote control unit by identifying the supplied idling information" or that "said control unit and said signal receiver are placed in a continuously activated condition when said control unit detects the idling information of the received remote control signal," the Examiner has failed to establish a prima facie case of obviousness. The rejection of claims 6 and 8-10 is reversed.

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Claims 11-20

Claim 11 does not recite that the idling information comprises a plurality of digital bits.

Claim 11 recites that "said control unit detects a transmission of said remote control signal by identifying said idling information" (emphasis added) which is similar to the limitation discussed in connection with claim 1 which is missing from the combination of the APA and Suman.

In addition, claim 11 recites "wherein the signal processing unit does not include an electric field detector." The Examiner concludes that this would have been obvious because "the skilled artisan would have readily recognized that it is not necessary for the prior art system to include an electric field detector if the detection is based on detecting the idling information, i.e. start bits" (EA6). However, the Examiner has not established that Suman performs detection of transmission based on identifying the start bit, so as to provide the necessary motivation to eliminate the electric field detector in the APA.

Because the combination of the APA and Suman does not suggest that "said control unit detects a transmission of said

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remote control signal by identifying said idling information" or "wherein the signal processing unit does not include an electric field detector," the Examiner has failed to establish a prima facie case of obviousness. The rejection of claims 11-20 is reversed.

Claim 21

Claim 21 does not recite that the idling information comprises a plurality of digital bits.

Claim 21 recites "wherein, in response to the presence of said idling information in one of the successive plurality of reception signals, said control unit continuously generates said control signal such that the data information of the received remote control signal is transmitted from the signal processing unit to the control unit." We do not find a suggestion in Suman to continuously generate a control based on the presence of idling information. Accordingly, we conclude the Examiner has failed to establish a prima facie case of obviousness. The rejection of claim 21 is reversed.

NEW GROUND OF REJECTION PURSUANT TO 37 CFR § 1.196(b)

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Claims 11-20 are rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which Appellant regards as his invention. Claim 11 recites that "said control unit and said signal receiver are continuously placed in the activated condition when said control unit detects an electric field of the received remote control signal" which is inconsistent with the later recitation that "the signal processing unit does not include an electric field detector" as well as with Appellant's description of what he regards as his invention.

CONCLUSION

The rejections of claims 1, 2, 4-6, and 8-21 are reversed.

A new ground of rejection has been entered against claims 11-20 pursuant to 37 CFR § 1.196(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection

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shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED - 37 CFR § 1.196(b)

LEE E. BARRETT)
Administrative Patent Judge)

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MICHAEL R. FLEMING
Administrative Patent Judge

STUART S. LEVY
Administrative Patent Judge

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James P. Naughton
BRINKS, HOFER, GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610